



Full Solar Cooker Assembly

This guide will help you fully assemble the Parabolic Solar Cooker.

Written By: Ashlie Reott



INTRODUCTION

The solar cooker assembly should be performed in an large open area with nothing that obstructs the sunlight. We recommend at least two people for the quickest and easiest assembly.



TOOLS:

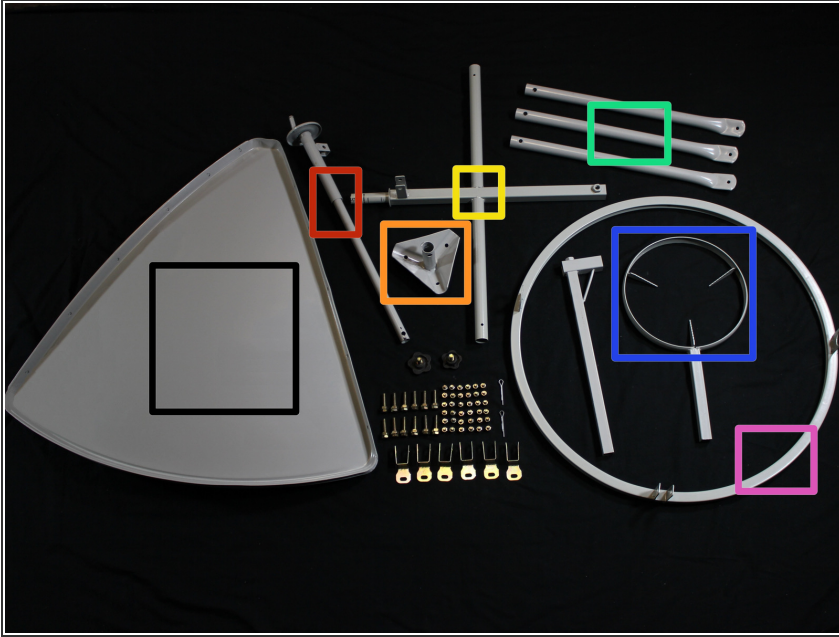
- [3/8" Drive Ratchet](#) (1)
- [14 mm socket](#) (1)
- [10mm Socket](#) (1)
- [14mm Wrench](#) (1)



PARTS:

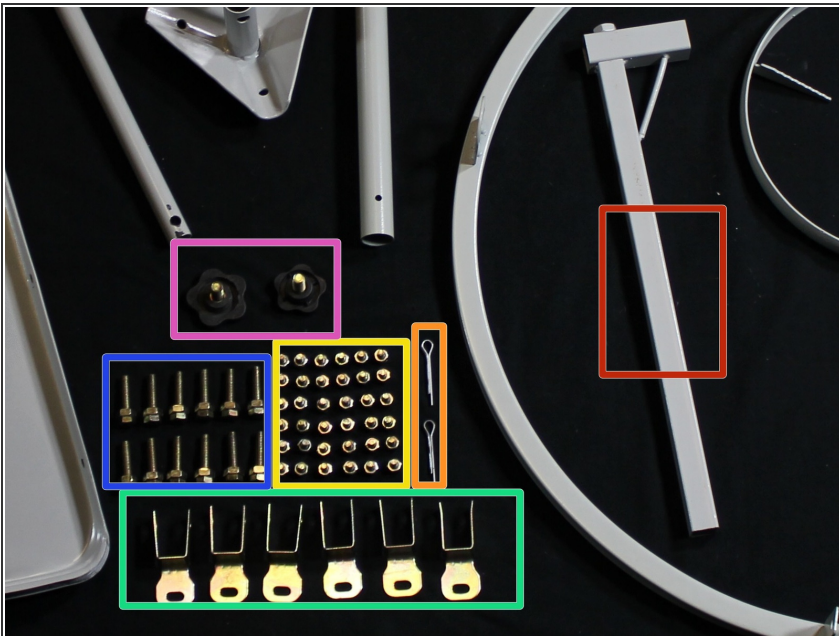
- [Solar Panels](#) (6)
- [Pipe Ring Brackets](#) (6)
- [10mm screws](#) (36)

Step 1 — Parabolic Solar Cooker Part Inventory



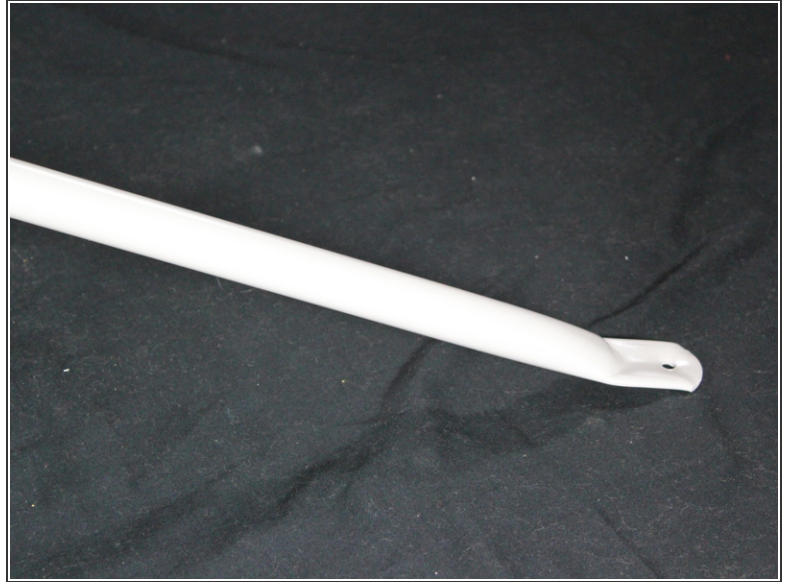
- An inventory for all parabolic solar cooker parts follows below.
- 6 Reflective Dish Sections
- 1 Expansion Pipe
- 1 Tripod Center Plate
- 1 T-Bar
- 3 Tripod Base Legs
- 1 Cooker Flat
- 1 Pipe Ring

Step 2



- The solar cooker part inventory continues below.
- 1 Cooker Flat Stand
- 2 Cotter Pins
- 36 x 10mm Nut/Bolt Pairs
- 6 Pipe Ring Brackets
- 12 x 14mm Nut/Bolt Pairs
- 2 Cooker Assembly Adjustment Star Knobs

Step 3 — Assembling Parabolic Solar Cooker Tripod Base Stand



- Insert a 14mm bolt through each tripod leg and through the center plate. Secure each bolt by hand threading a nut on the other side.
- ⓘ Be sure the flat side of each tripod leg is facing toward the ground.

Step 4




- Tighten each nut using two 14mm wrenches until each leg is stable and the tripod will stand on its own.

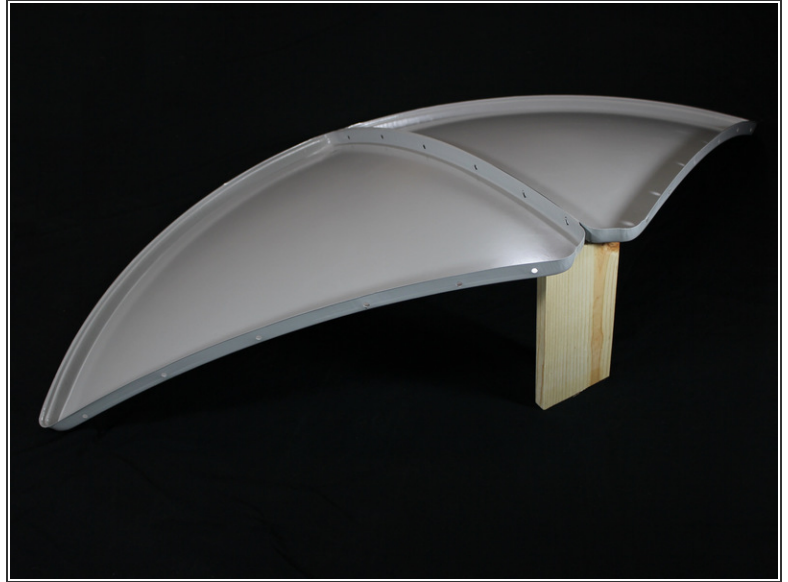
Step 5 — Assembling Parabolic Solar Cooker Expansion Pipe and T-Bar





- Center the bottom of the expansion pipe between the tabs of the t-bar bracket. Insert a 14mm bolt through the bracket and expansion pipe and hand thread a nut. Use 14mm wrenches to secure the assembly.

 It does not matter which direction the 14mm bolt is inserted from.

Step 6 — Assembling Reflective Parabolic Dish



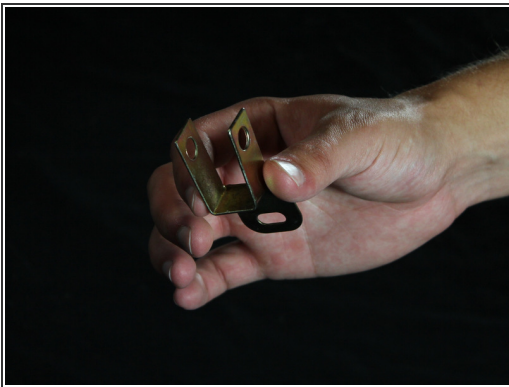
-  Before you begin, be sure you have all parts and tools needed for assembly and a construction area that is at least two meters in diameter.
- Lay two triangular sections side-by-side with pointed edges and bases adjacent to each other.
-  Since the sections are not flat, it is advisable to prop one end up on a box or similar object to give more stability during assembly.

Step 7



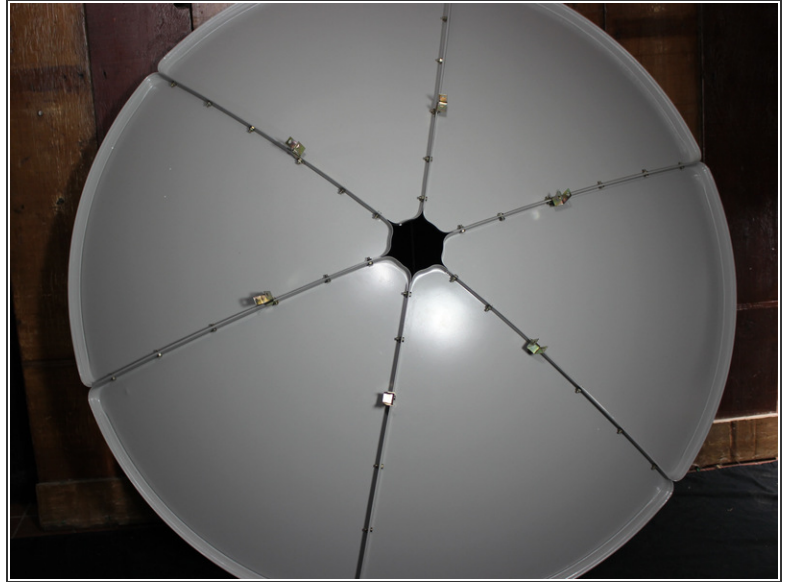
- Use the 10 mm nuts and bolts to attach the two plates together. First, hand thread each bolt/nut pair, then use two 10 mm wrenches secure them.
- DO NOT install a nut and bolt in the **THIRD** hole from the center (pointed end of the section). This is where the Pipe Ring Bracket is attached later on.

Step 8



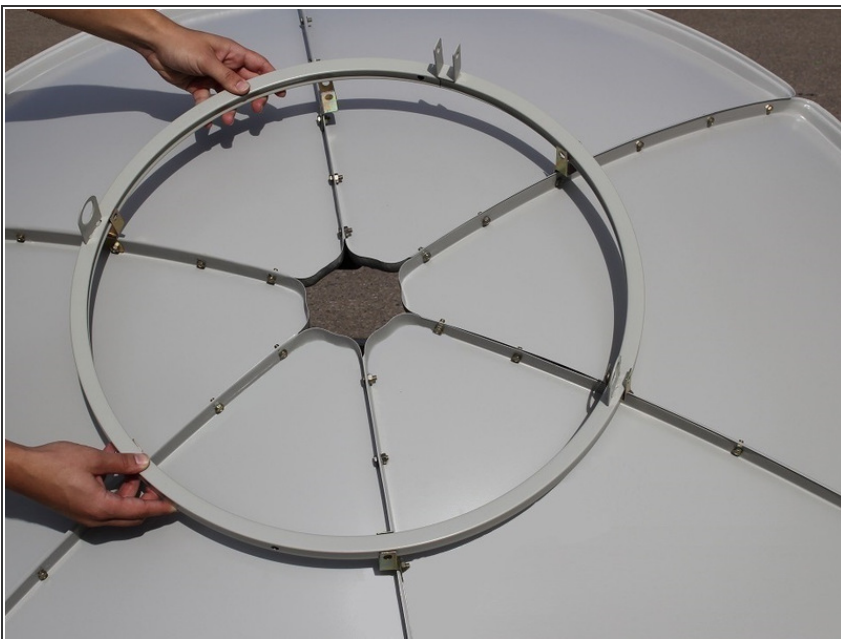
- ① After firmly fastening the two sections together, return to the third hole which was left empty. In addition to a nut and bolt, you will also need a pipe ring bracket.
- Install the 10mm nut/bolt again but with the bolt passing through the single holed side of the bracket. Hand thread and use 10mm wrenches to tighten.
- ① Be sure the bracket is **NOT** installed between the edges of the dish sections.
- ① The direction the bracket faces does not matter.

Step 9



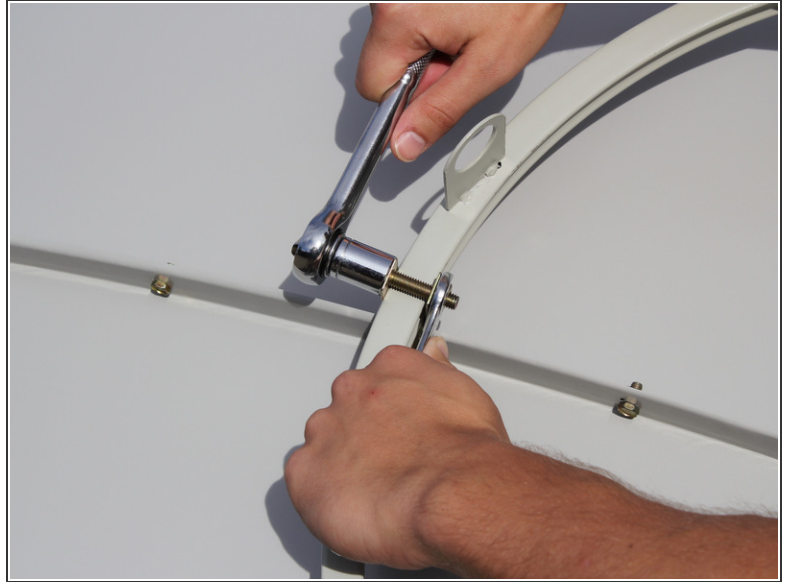
- Repeat steps 2-3 until you have assembled the entire reflective dish, complete with all six sections.
- ☑ Remember to install the pipe ring brackets in the correct place all the way around the reflective dish in the third hole from the center.

Step 10 — Full Solar Cooker Assembly



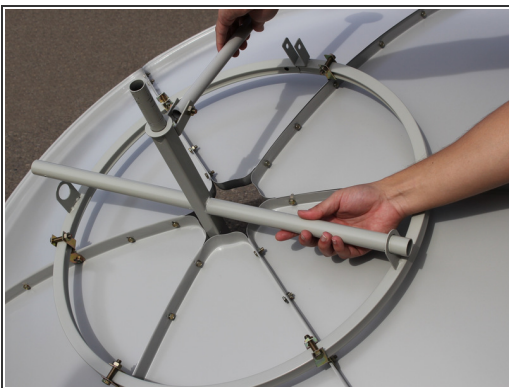
- Place the assembled solar panel dish face down with the metal brackets on the top and facing up.
- Set the pipe ring in the metal brackets circling the center of the dish.

Step 11



- Insert a 14mm bolt through each six metal brackets and secure with a nut.
- Tighten using two 14mm wrenches until secure.

Step 12



- Slide the cross bearer into the two holes in the support ring making sure the top of the cross sticks through the center of the solar panel dish.
- Insert a 14mm bolt into the metal bracket on the support ring through the adjustable arm and secure with a nut.
- Tighten with your hands.

Step 13



- Insert a cotter pin through the holes at each end of the cross bearer.

Step 14



- Attach the top of the center plate of the tripod base stand to the cross bearer bar making sure the flat side of the tripod legs points away from the solar panel dish.

Step 15



- Stand the solar cooker upright on the tripod stand and attach the cooker ring stand to the cross bar coming through the center of the solar panel dish.
- Screw a star knob screw into the hole in the top of the cross bar and tighten with your hand.

To disassemble your device, follow these instructions in reverse order.

This document was last generated on 2017-07-26 07:30:20 PM.